



October 27, 2006

Charles L.A. Terreni
Chief Clerk and Administrator
South Carolina Public Service Commission
Post Office Drawer 11649
Columbia, South Carolina 29211

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.
Power Plant Performance Report (September 2006)

Dear Mr. Terreni:

Enclosed are an original and one copy of the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of September 2006.

Sincerely,

s/ Len S. Anthony

Len S. Anthony
Deputy General Counsel – Regulatory Affairs

LSA/dhs
Enclosures
45612

c: John Flitter (ORS)

September 2006

The following units had no off-line outages during the month of September:

Brunswick Unit 1
Brunswick Unit 2
Robinson Unit 2
Roxboro Unit 2
Roxboro Unit 4

Harris Unit 1

Full Forced Outage

- A. Duration: The unit was taken out of service at 10:00 on September 19, and returned to service at 01:51 on September 22, a duration of 63 hours and 51 minutes.
- B. Cause: Generator Lock-Out Relay Failure
- C. Explanation: The unit experienced an automatic shutdown due to a faulty generator ground trip relay. The relay is designed to detect a ground in the main generator and 22-kV components and initiate a generator lock-out, which is a safety feature designed to prevent equipment damage to these components.
- D. Corrective Action: The generator ground relays were replaced, and the unit was returned to service.

September 2006

Mayo Unit 1

Full Forced Outage

- A. Duration: The unit was taken out of service at 19:23 on September 7, and returned to service at 05:10 on September 8, a duration of 9 hours and 47 minutes.
- B. Cause: Loss of Cooling Water Pressure
- C. Explanation: The unit was taken out of service to investigate and repair the failure of a cooling water pump, which caused a loss in cooling water pressure.
- D. Corrective Action: Corrective maintenance activities were performed to repair the cooling water pump, and the unit was returned to service.

September 2006

Roxboro Unit 3

Full Scheduled Outage

- A. Duration: The unit was taken out of service at 01:13 on September 30, and remained off-line for the remainder of the month. The unit was off-line for a duration of 22 hours and 47 minutes during the month of September.
- B. Cause: Major Turbine Outage and Boiler Inspection
- C. Explanation: The unit was taken out of service for a major turbine outage and boiler inspections.
- D. Corrective Action: Planned outage activities, including the turbine overhaul and boiler inspections, were in progress at the end of September.

	Month of September 2006		Twelve Month Summary		See Notes*
MDC	938 MW		938 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	677,115 MWH		7,154,913 MWH		2
Capacity Factor	100.26 %		87.08 %		
Equivalent Availability	97.78 %		85.40 %		
Output Factor	100.26 %		100.33 %		
Heat Rate	10,355 BTU/KWH		10,400 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	562,800	6.85	3
Partial Scheduled	249	0.04	36,692	0.45	4
Full Forced	0	0.00	292,813	3.56	5
Partial Forced	14,772	2.19	290,628	3.54	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	675,360		8,216,880		8

* See 'Notes for Nuclear Units' filed with the January 2006 report.

** Gross of Power Agency

	Month of September 2006		Twelve Month Summary		See Notes*
MDC	937 MW		928 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	642,823 MWH		7,828,582 MWH		2
Capacity Factor	95.28 %		96.33 %		
Equivalent Availability	95.11 %		94.41 %		
Output Factor	95.28 %		99.12 %		
Heat Rate	10,643 BTU/KWH		10,522 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	231,001	2.84	3
Partial Scheduled	8,767	1.30	94,826	1.17	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	24,255	3.60	100,728	1.24	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	674,640		8,127,090		8

* See 'Notes for Nuclear Units' filed with the January 2006 report.

** Gross of Power Agency

	Month of September 2006		Twelve Month Summary		See Notes*
MDC	900 MW		900 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	588,819 MWH		7,006,517 MWH		2
Capacity Factor	90.87 %		88.87 %		
Equivalent Availability	90.51 %		88.17 %		
Output Factor	99.71 %		100.46 %		
Heat Rate	11,026 BTU/KWH		10,886 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	820,800	10.41	3
Partial Scheduled	0	0.00	991	0.01	4
Full Forced	57,465	8.87	79,650	1.01	5
Partial Forced	4,019	0.62	102,693	1.30	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	648,000		7,884,000		8

* See 'Notes for Nuclear Units' filed with the January 2006 report.

** Gross of Power Agency

	<u>Month of September 2006</u>		<u>Twelve Month Summary</u>		<u>See Notes*</u>
MDC	710 MW		710 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	525,620 MWH		6,026,454 MWH		2
Capacity Factor	102.82 %		96.89 %		
Equivalent Availability	100.00 %		92.65 %		
Output Factor	102.82 %		103.83 %		
Heat Rate	10,924 BTU/KWH		10,755 BTU/KWH		
	<u>MWH</u>	<u>% of Possible</u>	<u>MWH</u>	<u>% of Possible</u>	
Full Scheduled	0	0.00	415,173	6.68	3
Partial Scheduled	0	0.00	41,068	0.66	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	0	0.00	774	0.01	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	511,200		6,219,600		8

* See 'Notes for Nuclear Units' filed with the January 2006 report.

	Month of September 2006		Twelve Month Summary		See Notes*
MDC	745 MW		745 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	329,688 MWH		4,528,479 MWH		2
Capacity Factor	61.46 %		69.39 %		
Equivalent Availability	94.95 %		92.94 %		
Output Factor	62.31 %		73.51 %		
Heat Rate	11,199 BTU/KWH		10,522 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	312,677	4.79	3
Partial Scheduled	16,716	3.12	31,999	0.49	4
Full Forced	7,288	1.36	40,130	0.61	5
Partial Forced	3,069	0.57	75,819	1.16	6
Economic Dispatch	179,639	33.49	1,537,096	23.55	7
Possible MWH	536,400		6,526,200		8

* See 'Notes for Fossil Units' filed with the January 2006 report.

** Gross of Power Agency

	Month of September 2006		Twelve Month Summary		See Notes*
MDC	670 MW		670 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	364,180 MWH		4,684,950 MWH		2
Capacity Factor	75.49 %		79.82 %		
Equivalent Availability	91.88 %		92.97 %		
Output Factor	75.49 %		83.10 %		
Heat Rate	9,362 BTU/KWH		9,402 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	159,929	2.72	3
Partial Scheduled	39,193	8.12	179,788	3.06	4
Full Forced	0	0.00	71,411	1.22	5
Partial Forced	0	0.00	1,381	0.02	6
Economic Dispatch	79,027	16.38	771,741	13.15	7
Possible MWH	482,400		5,869,200		8

* See 'Notes for Fossil Units' filed with the January 2006 report.

	Month of September 2006		Twelve Month Summary		See Notes*
MDC	707 MW		707 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	334,860 MWH		4,347,402 MWH		2
Capacity Factor	65.78 %		70.20 %		
Equivalent Availability	96.46 %		94.23 %		
Output Factor	67.93 %		72.38 %		
Heat Rate	10,031 BTU/KWH		10,116 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	16,108	3.16	186,731	3.02	3
Partial Scheduled	0	0.00	73,781	1.19	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	1,933	0.38	96,930	1.57	6
Economic Dispatch	156,139	30.67	1,488,476	24.03	7
Possible MWH	509,040		6,193,320		8

* See 'Notes for Fossil Units' filed with the January 2006 report.

	Month of September 2006		Twelve Month Summary		See Notes*
MDC	700	MW	700	MW	1
Period Hours	720	HOURS	8,760	HOURS	
Net Generation	294,997	MWH	4,037,869	MWH	2
Capacity Factor	58.53	%	65.85	%	
Equivalent Availability	93.55	%	94.90	%	
Output Factor	58.53	%	66.76	%	
Heat Rate	10,619	BTU/KWH	10,586	BTU/KWH	
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	77,770	1.27	3
Partial Scheduled	31,512	6.25	176,924	2.89	4
Full Forced	0	0.00	5,600	0.09	5
Partial Forced	1,020	0.20	52,639	0.86	6
Economic Dispatch	176,471	35.01	1,781,198	29.05	7
Possible MWH	504,000		6,132,000		8

* See 'Notes for Fossil Units' filed with the January 2006 report.

** Gross of Power Agency

Plant	Unit	Current MW Rating	January 2005 - December 2005	September 2006	January 2006 - September 2006
Asheville	1	198	67.75	58.51	72.40
Asheville	2	194	70.36	59.04	57.64
Cape Fear	5	143	71.61	62.29	77.81
Cape Fear	6	173	64.61	55.62	66.20
Lee	1	79	51.59	20.03	51.63
Lee	2	76	51.41	22.22	47.55
Lee	3	252	61.16	51.94	65.87
Mayo	1	745	75.91	61.46	66.77
Robinson	1	174	77.78	69.56	78.95
Roxboro	1	385	77.66	76.56	76.94
Roxboro	2	670	64.35	75.49	81.84
Roxboro	3	707	68.49	65.78	72.44
Roxboro	4	700	67.87	58.53	66.24
Sutton	1	97	51.17	38.98	48.66
Sutton	2	106	54.71	31.38	50.12
Sutton	3	410	59.66	44.32	54.28
Weatherspoon	1	49	44.37	17.72	40.36
Weatherspoon	2	49	42.93	19.42	42.43
Weatherspoon	3	78	61.89	28.68	55.69
Fossil System Total		5,285	67.22	59.17	67.85
Brunswick	1	938	94.38	100.26	82.41
Brunswick	2	937	86.02	95.28	95.33
Harris	1	900	100.59	90.87	84.43
Robinson Nuclear	2	710	92.77	102.82	103.86
Nuclear System Total		3,485	93.49	97.02	90.78
Total System		8,770	77.59	74.21	76.96

Amended SC Fuel Rule
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor $\geq 92.5\%$ during the 12 month period under review. For the test period April 1, 2006 through September 30, 2006, actual period to date performance is summarized below:

Period to Date: April 1, 2006 to September 30, 2006

Nuclear System Capacity Factor Calculation (Based on net generation)

A. Nuclear system actual generation for SCPSC test period	A =	13,650,985	MWH
B. Total number of hours during SCPSC test period	B =	4,391	hours
C. Nuclear system MDC during SCPSC test period (see page 2)	C =	3,485	MW
D. Reasonable nuclear system reductions (see page 2)	D =	1,737,443	MWH
E. SC Fuel Case nuclear system capacity factor: $[(A+D) / (B+C)] * 100 =$			
100.6%			

NOTE:

If Line Item E $\geq 92.5\%$, presumption of utility's minimum cost of operation.

If Line Item E $< 92.5\%$, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: April 1, 2006 to September 30, 2006

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	937 MW	900 MW	710 MW	3,485 MW
Reasonable refueling outage time (MWH)	160,194	0	829,590	0	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	314,306	241,406	79,683	6,384	
Reasonable coast down power reductions (MWH)	2,692	3,591	0	0	
Reasonable power ascension power reductions (MWH)	23,143	39,873	4,019	0	
Prudent NRC required testing outages (MWH)	5,519	19,849	36	6,384	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	774	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	505,855	304,719	913,328	13,541	
Total reasonable outage time exclusions [carry to Page 1, Line D]					1,737,443